NCIR Direct Onboarding Process

Version 1.0

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Document Owner: NCIR

Document Revision History

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North Carolina Immunization Registry (NCIR) Onboarding process:

1.0 Background:

The purpose of this document is to outline NCIR specific onboarding process for providers connecting directly to the NCIR or through a vendor Hub. As part of Meaningful Use Stage 2, Eligible Hospitals (EH) and Eligible Providers (EP) are required to register their intent to submit data with DPH. EH and EP must register with NCIR/DPH within 60 days of reporting period. The reporting periods are listed in the Appendix for reference. As part of registration with DPH, providers will complete the NCIR on boarding questionnaire form.

NCIR team will review the responses to the NCIR Onboarding questionnaire form to decide data exchange capability, type of data exchange and timing of the onboarding process. If provider has the required data exchange capabilities, NCIR team will assign the provider/hospital to one of the following three categories. Note that being in any of the following three categories allows an organization to meet that particular MU2 public health objective.

- A. In progress or ready to begin onboarding: Once a decision is made to onboard an organization, NCIR will send out an e-mail to the organization indicating that they can start the onboarding process. The remainder of this document addresses the NCIR specific steps to be completed as part of onboarding process. On successful completion of the onboarding steps the provider can begin sending data to production.
- B. **Waiting for invitation from state:** Provider has completed registration with DPH and is waiting for an invitation from state to on board. The number of providers in this status will depend on the level of interest by providers to participate in Meaningful Use Stage 2 for a specific reporting period. After 60 days of a reporting period, the list of providers who have registered will be available to the NCIR. NCIR will use this list to send invitations to onboard based on resources available.

Note that the NCIR specifications and onboarding documents are subject to change and are released to an organization at the time of invitation to onboard. As specifications are subject to change, receiving the latest specification prior to onboarding helps providers avoid costly and unnecessary changes and set up based on stale specifications. State [NC DHHS] will have a FAQ that responds to commonly asked questions and the NCIR Data Exchange Helpdesk will continue to respond to general questions about status of onboarding and registrations etc. However, it should be noted that the State [NC DHHS] will respond to questions about HL7 technical specifications from organizations that are invited to on-board. This allows State [NC DHHS] to provide a level of service that is necessary to on-board providers who are currently onboarding. When it is your organization's turn, this will allow you to receive the needed service as well.

C. **Ongoing submission achieved:** These are providers that have completed onboarding process and are sending ongoing data submissions. NCIR is unlikely to have any in this category at least for the first reporting period but possibly in the subsequent reporting period.

2.0 Resources needed from Provider Organization:

Resources needed from provider organization for this exercise include provider personnel familiar with Immunizations and EHR system as well as assistance from EHR vendor. The provider organization personnel may need the help of EHR vendor to set up vaccines, trade name etc. Please make sure you have all necessary resource before agreeing to a project schedule. NCIR personnel will not be able to help with any questions related to EHR system.

3.0 Onboarding process Steps:

The on boarding process has the following steps.

- 1. **Documentation:** NCIR will send the following documents to the organization. **Specifications:**
 - a. NCIR HL7 2.5.1 QBP/RSP specifications
 - **b.** NCIR HL7 2.5.1 VXU specifications
 - c. Transport specifications provided by NCIR to help with connection details

Onboarding Documents:

- d. NCIR Onboarding questionnaire
- e. NCIR Required and Recommended fields
- f. NCIR Organization and Site Information
- g. NCIR Vaccine and Trade Name mapping
- 2. **Organization readiness check:** The organization will review above documents and send the completed NCIR Onboarding questionnaire document for review. In addition, the provider will let NCIR know either that they are compliant with NCIR HL7 2.5.1 specifications and are capable of meeting transport specifications outlined in the documents above or that their software needs change to meet the above specifications. If changes to software are needed, organization will provide a timeline when they will be able to meet the above specifications.

- 3. **Stake holders meeting:** Once an organization is ready, NCIR will set up an initiation meeting with organization representatives, EHR representative, NCIR members. Prior to meeting, the organization will complete and send the Required and Recommended fields and NCIR Organization and Site information document. This meeting will decide on a high level timeline and ensure right resources are available from all parties to perform the roll out. NCIR will walk through the onboarding process, address any questions and review the completed documents.
- 4. **Agreements needed by NCIR, DPH:** Send completed confidentiality agreement to the NCIR Technical Data Analyst. [This needs to be finalized as part of pilot.]
- 5. **Organization set up in the NCIR:** NCIR will complete the setup of Organization and Site information in the NCIR test system and will pass the NCIR facility ID (for message header MSH-4) and NCIR Site id (for Immunization location) to the organization. NCIR will also set up Manage Data exchange screen with applicable values to allow data exchange for the organization.
- 6. **NCIR clinical data elements set up:** Provide a list of ordering providers and administering providers (clinicians) to NCIR Technical Data Analyst to add to the NCIR. NCIR Technical Data Analyst will add ordering providers and administering providers to the NCIR test system and will send a screen shot by fax or e-mail for verification. The organization will verify to make sure that it is set up correctly before proceeding to next step. The list of clinicians and ordering providers set up in the NCIR must match what is in the EHR. It is suggested to use the list from production to minimize impact when migrating to production.
- 7. **Connection between NCIR and the organization's EHR:** If an organization has the capability to meet NCIR specifications and transport specifications, NCIR will provide the necessary information to establish a connection between EHR system or vendor hub and the NCIR. This will include any user ID, password, certificates etc. The EHR vendor or IT department of the organization will test and verify that the connection is established.
- 8. Vaccine Table Review and provide listing from EHR: The list of vaccines that NCIR supports and associated CVX codes are listed in the NCIR Vaccine and Trade Name mapping document and the LIG's. Verify that vaccines in the NCIR list are included in the EHR system and are mapped to correct CVX codes. Provide a print out of vaccines and associated CVX codes from the EHR system to the NCIR Technical Data Analyst for review. Note that CVX code is required for almost all vaccines sent to the NCIR.
- 9. Trade Name Table Review and provide listing from EHR: A list of Trade Names that NCIR supports and the associated NCIR Trade Name code is available in the NCIR Vaccine and Trade Name mapping document and the LIG's. Verify that the Trade Names in the NCIR list are included in the EHR system and are mapped to the correct NCIR Trade Name code. Provide a print out of Trade names and associated NCIR trade name codes from the EHR system to the NCIR Technical Data Analyst for review. Note that for vaccines administered by your organization, you will need to provide CVX code and NCIR Trade Name Code in the message.

- 10. **NCIR Table Review:** NCIR Technical Data Analyst will review Vaccine and Trade Name listing from EHR system (listed in above steps) and will recommend change(s) if any. The organization will provide an updated Vaccine and Trade Name listing if corrections are made.
- 11. **Preliminary Vetting**: NCIR Technical Data Analyst will send an Excel document with a list of 14 scenarios. The tester will enter these 14 scenarios in the EHR system and send the transactions to the NCIR and verify results using acknowledgement received. The tester will send the completed Excel document to NCIR Technical Data Analyst for review and fix any issues identified in the preliminary vetting prior to start of data exchange manual testing (clinical testing).

As part of preliminary testing you can provide Provide sample HL7 2.5 messages for the following scenarios to the NCIR contact.

- a. Owned Immunization: Immunization administered by your organization.
- **b.** Historical Immunization: Immunization reported by your organization but administered by another organization.
- **c.** Client demographics with one or two responsible person and their address.
- **d.** Client with contra indications.
- 12. **NCIR Data Exchange Testing Manual:** NCIR Technical Data Analyst will send the NCIR Data Exchange Testing Manual that applies to the organization. This manual will contain specific test cases that must be met to complete the onboarding process. The test cases selected will depend on type of provider (VFC or non-VFC provider, single or multi-site), purpose of data exchange (handle inventory decrement or not), and/or data exchange type (single or bi-directional) desired.
- 13. **Test case entry in the EHR:** The organization will enter the test cases that are in the NCIR Data Exchange Testing Manual into the EHR system and will fax/e-mail the following screen prints from the EHR system to the NCIR Technical Data Analyst
 - a. Client demographic information including responsible person and address.
 - **b.** Immunization screen to show immunizations entered.
 - c. Client contra-indications

Entering test cases into EHR system may automatically trigger corresponding HL7 2.5 messages to be created and sent to the NCIR. If not, check with EHR vendor and perform necessary actions to send the corresponding HL7 2.5 messages to the NCIR. Once all test cases are entered into the EHR system, the provider organization will notify the NCIR personnel by e-mail (to ncirdataexchange@dhhs.nc.gov) that the test cases have been sent to the NCIR. In the e-mail include your organization name, date and approximate time the test cases were entered and sent to the NCIR.

14. **NCIR Test Case and HL7 message Review:** NCIR Technical Data analyst will review client and Immunization information received in the NCIR along with screen prints provided. NCIR

Technical team will also review HL7 messages received if needed.

- 15. **Repeat tests from last two steps if needed:** If changes are required to EHR system or user procedures as a result of previous steps, NCIR Technical Data Analyst will provide feedback and repeat the tests until all test cases pass successfully. This is an iterative process and will depend on the issues identified in the test cases.
- 16. **Sign off:** Once all test cases pass, NCIR Technical Data Analyst and organization representative will sign off on the onboarding process and the organization is ready to send data to the NCIR In production mode. NCIR Technical Data Analyst will provide Post- Production checklist and requirements prior to production roll out.



Appendix - I:

Reporting periods for Eligible providers and Eligible Hospitals are listed below for reference.

Eligible providers (EP):

- (A) January 1, 2014 through March 31, 2014
- (B) April 1, 2014 through June 30, 2014
- (C) July 1, 2014 through September 30, 2014
- (D) October 1, 2014 through December 31, 2014

Eligible hospitals (EH)

- (A) October 1, 2013 through December 31, 2013
- (B) January 1, 2014 through March 31, 2014
- (C) April 1, 2014 through June 30, 2014
- (D) July 1, 2014 through September 30, 2014